

completing its growth the caterpillar spins a thin silken cocoon, and within this changes to a brownish pupa; in a few days later the moth emerges. The perfect insect resembles somewhat a clothes moth. The wings expand about half an inch, are of a satiny cream colour and bear a few dark spots on the fore wings, which are narrow, pointed and fringed. The hind wings are darker and have much wider fringes.

*Remedies.*—When stored grain is found to be infested by one of the above three insects, or, in fact, by any insects which are known to work in dry cereals, it is a simple matter to destroy them. After repeated experiments, it has been found that the use of bisulphide of carbon will kill all the insects without any injury to the grain as to its wholesomeness for food, or as to its germinating quality for seed. Bisulphide of carbon is a colorless liquid with a very objectionable odour, which vaporizes quickly at the ordinary temperature of the atmosphere. A convenient method for treating small quantities of infested grain, is to fill an ordinary coal-oil barrel, which will hold about five bushels of grain, and the quantity of bisulphide to use is one ounce to every hundred pounds of seed. The bisulphide may be poured right on to the grain or placed in a shallow receptacle, but care must be taken to close up the top of the barrel tightly. This is best done with a cap made specially for the purpose, but may also be done with fine sacks laid smoothly on the top, over which boards are laid, with a considerable weight on them to hold the covering down closely. When grain in bins is being fumigated with bisulphide of carbon, these should be made as nearly air-tight as possible. This may be done by pasting sheets of paper over the outside, or by covering them with blankets or canvas. In tight bins the amount of bisulphide to use is a pound to a pound and a half to the ton of grain. Some entomologists claim that one pound of bisulphide to every 100 bushels of grain is sufficient to destroy all insects, even in open bins. Infested grain should be subjected to the fumes of bisulphide of carbon for at least 48 hours, but as the vapour is very inflammable, no light of any kind must be brought near and no smoking must be allowed near the building when this chemical is being used.

In Queensland it has been found that salt (1 quart dissolved in 2 gallons of water) will prevent weevils from attacking grain which has been sprinkled with this solution.